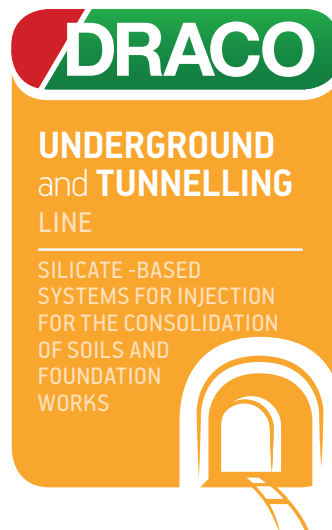


DRACOSOIL SS

ONE COMPONENT NANO SILICEOUS POWDER PRODUCT
FOR SOIL WATERPROOFING AND CONSOLIDATION



DRACOSOIL SS it's a one component, ready to use siliceous binder in powder form, to be used in soil conditioning work to strengthen, consolidate soils while reducing water permeability and seepages in soil texture.



BENEFITS

- ✓ Quick-hardening.
- ✓ Adjustable workability/setting/hardening times, by using a special accelerator.
- ✓ More permeation with low injection pressure and lower pull-out risk.
- ✓ High reduction of the water permeability (bleeding, absorption).
- ✓ Better saturation of wet structures, even where water infiltration occurs.
- ✓ Decreased permeability of the injected structure, also cracked hydraulic structures as well as dams, liquid tanks ect.
- ✓ Increased final compressive and share strength of treated soils.
- ✓ High durability of the hardened mix.
- ✓ Reducing cost and transport impact, cause it can ready dissolve in local potable water for making a injectable solution.
- ✓ It's a flexible product, it can be used in dry form for permit a superficial treatment in surged weak soil consolidation.
- ✓ By a correct saturation it permit to reduce the eluate permeation in heavy metal polluted soil.
- ✓ It's free of a toxic acidic ester substance, organic solvent, heavy metal, or harmful substance.



IDEAL FOR

For dry superficial soil treatment:

- ✓ Reinforcing and reducing water permeability in strengthening works.
- ✓ Loamy and sandy soils that are difficult to treat with three-phase bentonite-cement mixes.
- ✓ Reducing the risk of landslides.
- ✓ Sealing injections to impede water ingress even in compact and microporous structures.
- ✓ Rapid blocking of medium and high flow-rate water infiltration on concrete and loamy soils.
- ✓ Sealing and waterproofing repair of shafts, dams, tunnels and underground pipelines.
- ✓ Control and containment of water during underground operations, by using special catalyst.

APPLICATIONS

- ✓ By injection as monophasic binder with superior permeation for the reinforcement and waterproofing of loamy and sandy soils that are otherwise difficult to treat with triphasic microcement, bentonite and water mixes.
- ✓ By dry shake dispensing, as a superficial treatment on subgrade soil, before makes a flooring, by using a dry scraper mixer and commuter roller, of weak soil.

PREPARATION

For injection technique by a mannettes tube: dissolve the **DRACOSOIL SS** powder, in the clear water, better a little warm water, by using a turbo mixer until obtain a homogeneous suspension.

Maintaining in agitation the suspension until a pumping in the soil regulating the person of injection for have a good saturation around the area of mannettes. A good result it's better use a double packer of injection devices, for permit a local saturation. In some case may be possible to go in clauquage situation in order to obtain a strong permeation/pressure consolidation in the soiling technique, specially in a lime base soils.

FOR DRY SUPERFICIAL SOIL TREATMENT

Dry shakes the powder on the soil surface and mix the soil by using a mix-scraper machine, in order to obtain a intimate contact between **DRACOSOIL SS** and weak soil. May be possible to adding a sprayed clear water during the mix, until to get, in a specially in a dry soil, a wetting aspect but not too sticky. After makes a compaction action by using a roller compacter until to reach a flat surface.

DOSAGE

Injection: In function of expected consolidation grade and/or presence of water in the soil, it can be modulated in orientative way, starting from 150kg/mc of **DRACOSOIL SS** and 850kg/mc of clear water and 400kg/mc **DRACOSOIL SS** plus 600kg/mc of clear water. The gel time may be varied among 10 minute (in more concentrates solution) and 1 hour about in more diluted solution, depending water temperature also.

Dry shake treatment: dispense on the surface soil a quantity calculated on the desired volume soil consolidation, ranging from 10kg/mc to 80kg/mc and more, depending of speed of hardening effect and consolidation. The better and quick result can be obtain by adding 80-100kg/mc of clear water, depending of natural soil moisture content, but avoid a sticky effect on the harrow mixer. It can be used together cement synergy consolidation as a special hardening catalyst. In this case may be reduced the dosage starting from 3kg/mc to 10kg/mc in a 100kg/mc cement range dosage. A preliminary laboratory check test is suggest, for makes a right optimization.

PACKAGING AND STORAGE

It available on 15kg bags or 500 kg big bags.

Stored properly in its original packaging, indoors in a dry location and at a temperature of 20°C, product will be stable for 6 month.

HANDLING PRECAUTION

The product is not toxic or harmful, but in powder form it is irritating and caustic. So it must be handled with rubber gloves, waterproof and disposable suit, protective eyeglasses. Be ready a MSDS sheet.



TECHNICAL SPECIFICATIONS

PHYSICAL STATE	fine granular powder
APPARENT SPECIFIC WEIGHT	1.2-1.5 kg/l about
COLOUR	white
MAIN CHEMICAL ACTION	polymer polysiliceous, water insoluble binder
SECONDARY CHEMICAL ACTION	argillous, lime, cement activator and makes the soluble heavy metals salts into the insoluble solid
YIELD VALUES	in injection system start from 150 kg to 400 kg/mc
WORK RANGE TEMPERATURE APPLICATION	+1°C to +40°C
STORAGE STABILITY	6 month